

REFUGE MANUAL

5. NEPA Compliance

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- 5.1 Purpose. The purpose of this chapter on the documentation of environmental considerations is to provide guidance to refuge personnel in the preparation of documents required by the National Environmental Policy (NEPA) Act of 1969 (See 1 RM 5 for complete citation.), and in accordance with Sections 1500.6 and 1507.3 of the regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508). Other relevant environmental laws and directives are also discussed.
- 5.2 Scope. This chapter of the manual describes the relationships of NEPA and its implementing regulations with the Departmental Manual 516 DM 1-6. Appendix 1 of 516 DM 1-6 contains directions specific only to the Service. The responsibilities of the Service under these regulations involving proposed Federal actions are described in this chapter, also.
- 5.3 Policy. It is the responsibility of all Service employees to ensure that NEPA is fully complied with in a reasonable, rational, and professional manner early in the planning process for all Service actions. The NEPA procedures are designed to ensure that information about the environmental effect of Federal proposals and reasonable alternatives to accomplish their purpose and need are available to the officials deciding whether or not to implement those actions. The process must include interactions with the public and those other government agencies having jurisdiction over or expertise on the subject. NEPA documents will concentrate on the issues that are significant to the action in question, rather than amass needless details.
- 5.4 Objectives. It is the objective of this chapter to provide direction to and consistency with Service compliance with the spirit and intent of NEPA and related environmental requirements, and to achieve a reduction in the amount of time and paperwork involved.
- 5.5 Authority. The Departmental Manual (516 DM 6.4) directs the Service to prepare handbooks providing guidance on how to implement NEPA in principal program areas. The Division of Refuge Management is required to maintain a manual to keep personnel informed of all requirements.
- 5.6 Responsibilities.
- A. Washington Office. The Office of Environmental Coordination (OEC) under the authority of the Associate Director - Environment serves as the focal point for all Service NEPA matters including interpretation of NEPA regulations, the Departmental Manual, and preparation of Service handbooks for NEPA compliance. OEC reviews environmental assessments (EAs) and environmental impact statements (EISs) in coordination with the Division of Refuge Management and advises the

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Director or Associate Director - Wildlife Resources on adequacy and compliance with NEPA regulations, the Departmental Manual, and the Service handbook.

- B. Regional office. Regional directors are responsible for determining whether or not an environmental impact statement is to be prepared. The preparation may be done by an EIS team leader designated by the regional director. The EIS team leader will have authority to assign staff to work on the EIS until it is completed. The regional director also arranges for and ensures compliance with the public participation requirements of NEPA regulations. Draft and final EIS's are to be approved by the regional directors for those Service actions where the decision according to 4 AM 4 is made at the regional level. A regional coordinator in each regional office will be directly responsible for NEPA matters as delegated by the regional director.
- C. Refuge. Refuge managers are responsible for informing their regional office of environmental issues, potential actions requiring an EA or EIS, and providing expertise and data for completion of NEPA documents. Refuge managers are responsible for providing or obtaining technical information and data on which decisions are based. The refuge manager or assistant refuge manager will generally be assigned the task of EIS team leader for EIS's involving that particular refuge.

5.7 Compliance with NEPA. How Service employees are to comply with NEPA during the planning and implementation of all actions is detailed in the Service's NEPA Planning and Documentation Handbook which has been distributed to all refuge offices. The NEPA Handbook provides detailed procedural guidance for integrating NEPA into Service planning actions. It utilizes and includes the NEPA regulations (40 CFR 1500-1508) and the Departmental Manual (516 DM 1-6) and requires a four step planning process explained in more detail in Exhibit 1.

- A. NEPA regulations. The NEPA regulations, prepared by the Council of Environmental Quality (CEQ) and codified in the Code of Federal Regulations (40 CFR 1500-1508), provide the basic procedural requirements for complying with NEPA and Executive Order 11514, as amended by E.O. 11991. They became fully effective on July 30, 1979 and are binding on all Federal agencies. The NEPA regulations emphasize that "...it is not better documents but better decisions that count. NEPA's purpose is not to generate paperwork but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. These regulations provide the direction to achieve this purpose."

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- B. Departmental Manual Part 516 DM 1-6. 516 DM 1 establishes the Department's policies for complying with NEPA and the NEPA regulations. Chapters 2-6 provide supplemental instructions for implementing the NEPA regulations and are incorporated in the Service's NEPA Handbook.
- C. Departmental Manual Part 516 DM 6, Appendix 1. Appendix 1 of 516 DM 6, issued August 25, 1980, sets forth for the Service:
- (1) major decision points for Servicewide NEPA compliance;
 - (2) a list of actions that are normally exempt from NEPA documentation requirements in addition to the Department wide exemptions in 516 DM 2.3; and
 - (3) a list of actions that normally require an EIS. (See Exhibit 5 for a summary of NEPA documentation needs.)
- 5.8 Environmental review and consultation requirements (40 CFR 1502.25). NEPA and other Executive Orders and policy directives require coordination with a variety of other environmental laws and procedures including the Fish and Wildlife Coordination Act the National Historic Preservation Act of 1966 the Endangered Species Act of 1973 as amended, Executive Orders 11988 and 11990 on floodplains and wetlands, and the Coastal Zone Management Act of 1972. Each of these laws and Executive Orders is described briefly in 1 RM 5. Not all of these requirements apply to each action. Some of the more common requirements are discussed below.
- 5.9 Cultural resources procedures. NEPA and extensive additional authorities require protection of historic, cultural, archeological, paleontological, and natural aspects of our environment in conjunction with all projects on Federal lands or for which Federal funds are expended.

Specific responsibilities and procedures pertaining to policy through which Service provides that protection are contained in 5 RM 16 of this manual. 36 CFR 800 establishes the procedures for protection of historic and public properties, by the Advisory Council on Historic Preservation in consultation with the State Historic Preservation Officer. The key element in fulfilling Service responsibilities hinges on providing professional evaluation whenever construction or other new disturbance of soil is proposed. Qualified private consultants or subject specialists employed by Service must be used. Resultant reports should conform to the reporting requirements in 36 CFR 66. A short statement summarizing the cultural resources should be incorporated into any EAs or EISs that are prepared for the proposed action.

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In addition, it is Service policy to comply with other State and local regulations to the maximum extent possible. Therefore, all requirements should be identified in the text of the EA/EIS. The responsibility for determining which permits are needed rests with the initiating project leader.

Refuge development and rehabilitation projects must be reviewed for permit needs under at least the following authorities.

A. Rivers and Harbors Act of 1899.

- (1) Section 9 - U.S. Army Corps of Engineers (COE) and U.S Coast Guard (bulkheads and bridge permits).
- (2) Section 10 - COE (work in navigable waters).

B. Clean Water Act of 1977.

- (1) Section 401 - Clean Water Certification - State Certifying Agency or EPA (for discharge pollutants to waters).
- (2) Section 402- EPA and/or State (compliance with National Pollution Discharge Elimination System (NPDES)).
- (3) Section 404 - COE and/or State (for discharge of dredge or fill to waters of U.S.). (The Environmental Protection Agency published final regulations "Guidelines for Specification of Disposal Sites for Dredged or Fill Material" in the Dec. 24, 1980, Federal Register. These regulations must be followed when planning all actions.)

C. State and local permits.

- (1) Construction permits (for various activities as states specify).
- (2) Clean Water Certification. (See B(1), above.)
- (3) Other as various States may require.

- 5.11 Compliance with wetland and floodplain Executive orders. On May 24, 1977, President Carter issued two Executive orders, EO 11988, Floodplain Management, and EO 11990, Protection of Wetlands. These orders underline the need to protect wetland/floodplain areas in order to retain their natural functions and values. Federal agencies are directed to avoid direct or indirect support of construction or development in wetlands/floodplains, whenever there is a practicable alternative which would

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avoid their alteration or modification. As part of all actions Federal agencies are required to do everything possible to restore, preserve, and enhance the natural and beneficial values of floodplains and wetlands. Agencies are also required to take action to reduce the impacts of floods on human safety, health and welfare.

The Service published the Final Procedures for Implementation of the Floodplains and Wetlands Executive Orders in the Tuesday, November 20, 1979 Federal Register - these must be followed for Service actions which will affect floodplain areas and wetlands. These procedures, with some minor revisions, have been incorporated into the Service Administrative Manual. (See 30 AM 11, Floodplains and Wetlands.) Refuge activities within wetlands/floodplains are subject to the substantive and procedural requirements.

- 5.12 Endangered Species Act of 1973. The Endangered Species Act amendments of 1978 require biological assessments on major construction projects (those requiring an EIS) for any threatened or endangered plant or animal species (listed or proposed) that is determined to be in the area affected by a project. Species lists are provided upon request by the regional office. Procedural requirements of the Act are detailed in 7 RM 2, Endangered Species Management.
- 5.13 Coastal Zone Management Act of 1972. Section 307 of the Act requires Federal consistency with approved State Coastal Management Programs for all Service activities that have spillover impacts that directly affect coastal zone areas, uses, or resources within the purview of a State's management program. Spillover impacts are those impacts that occur outside of a Federal boundary (such as a NWR) but within a State's Coastal Zone. The Coastal Zone Management Act excludes Federal lands from the Coastal Zone. Therefore, for compliance purposes, the Service is primarily interested in effects resulting from action on Federal lands that will impact areas outside Federal boundaries but within designated Coastal Zones. Consistency statements are to be prepared for Service development projects, activities listed in the State management program, and all other activities found to be significant.
- 5.14 Other environmental review and consultation requirements. Refuge managers must use the OMB Circular A-95 coordination process on all refuge actions requiring an EA or an EIS. This process has been developed to provide a formal vehicle for early evaluation, review, and coordination of Federal or Federally-assisted activities with State and local governments. Such coordination is intended to: promote orderly growth and development; allow State and local government opportunity to comment on the environmental impact of Federal or Federally-assisted activities; and encourage through early contact an expeditious process of intergovernmental coordination and review of proposed projects. The process is

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facilitated through a network of clearing-houses established at both State and areawide levels. The clearing-house function is to receive and disseminate project notifications to appropriate State and local review agencies, and provide liaison between those same agencies and the Federal agency proposing activity. Requirements for coordination with State and local agencies through the clearing-house process can be met through distribution of a finding of no significant impact or EISs through the clearinghouse. Names and addresses of appropriate clearing-houses are available from regional offices.

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4 RM 5 Exhibit 1

Four-Step NEPA Planning Process

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The NEPA planning process is designed to identify problems, to generate a range of possible alternative solutions, and to identify a "best solution" following careful consideration of the environmental effects of implementing the various alternatives.

A four-step planning process, as described below, is directly applicable to most NWRS field situations and is recommended for use by refuge personnel. The information to be contained in the NEPA documents is explained in the Service's NEPA Planning and Documentation Handbook.

- A. Identify problems/opportunities. Problem identification is an important but often difficult task. Sometimes proposed actions are selected to treat symptoms of problems, rather than the underlying causes of those problems. If, for example, waterfowl production is less than the refuge objective, in order to increase numbers, the underlying causes must be identified. If it is determined that brood size or breeding success is low, then possible causes could be nesting cover, availability of food, predation, or disease. This hierarchical form of analysis is over-simplified here, but illustrates the need to break a problem down to a component level where "problems" can be clearly focused on and potential solutions can be developed. This procedure avoids treating "symptoms" and not "problems". If, for example, it is proposed to build some low-level dikes to increase shallow water, the problem is not that there are an insufficient number of dikes; rather, the problem may well be that there are insufficient feeding areas to support the refuge objectives for migrating dabblers. Construction of low-level dikes to impound shallow water is one possible solution to the problem.

Problems and opportunities do not exist in the absence of goals or needs. For example, the program management document (PMD) for migratory birds establishes national waterfowl wintering goals that are considered in the development of flyway plans. Those plans identify the need for acreage capable of accommodating a predetermined number of waterfowl on the wintering grounds. If such acreage is not currently available, or is threatened with destruction, a problem has then been identified. Opportunities to protect valuable wintering acreage through acquisition or other means may emerge that would partly or wholly fulfill stated objectives. Yet, Service acquisition of wetland wintering habitat, in the absence of PMD goals, would not necessarily justify expenditure of public funds. There is a need at this early stage to clearly identify problems and opportunities and to define their relationship to Service goals and needs. Following completion of this task, a purpose has been established for Service to undertake action.

- B. Develop alternatives. Once problems and opportunities have been identified and their relationship to Service goals and needs clarified, alternative

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means to solve the problems or address the opportunities can be developed. This step in the process is one of the more creative; and it is profitable to seek assistance from field staff, other agencies, and interested public. Approaches such as brainstorming, workshops, and field trips can be effectively employed. An important consideration is to maintain an open mind and, initially, give serious consideration to all possible alternatives.

Only practical and implementable alternatives need be carried into the next planning stage. Criteria used to label unrealistic alternatives might include conflicts with legal mandates, Service policy, public unacceptability, or cost. The fact that the Service may not have authority to implement a particular alternative is not reason for discarding it from further consideration. Authorities can change over time; special authorization can be provided by Congress; cost or political feasibility of action taken by another agency may enhance the desirability of such an alternative; or simply action by another organization may prove to better serve resource needs.

In addition, formulation of alternatives may occur simultaneously at several levels of problem resolution. For example, protection of an area determined to have outstanding wildlife habitat values could involve the use of a variety of strategies. Alternatives, including conservation education programs, memoranda of agreement, local property tax incentives, land use regulation, or acquisition options--such as leases, easements, or fee simple purchase--could all be considered viable, depending upon local circumstances. A multifaceted program combining several of the above-mentioned components might prove to be the most practical approach. The "best solution" might require the involvement of several agencies and organizations in both planning and implementation. As wildlife habitat becomes increasingly scarce, and competition for its use becomes more keen, such alternatives may appear more politically palatable to Congress, local and regional governments, and other special interests.

A key consideration in initial development of alternatives is not to jump to conclusions and select a preferred alternative too early in the process, just because "we've always done it that way"; nor is it fair to prejudge an alternative as unworkable--just because "we've never done it that way". The former posture often results in early and sometimes unwarranted justification of an alternative; the latter attitude can stifle innovation and creativity.

A valuable resource to be utilized in this process is the public. Use of other employees in the Service, other governmental agencies, special interest groups, and interested citizens in this stage of the process can be both cost effective and extremely productive. Individuals or groups not bound by the constraints of the traditional manner by which the Federal

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Government undertakes activities, may be able to identify unconventional, yet practical, means to accomplish the task at hand. Section 3.5 (Public Involvement) of the Service's NEPA Handbook should be consulted for procedures involving the public.

- C. Analyze effects of alternatives. Implementation of an alternative may generate a variety of potential effects that could include: physical, biological, cultural, economic, and/or social elements. Some effects would be considered beneficial and others adverse--largely depending upon who is viewing the alternative. It is necessary to identify effects and to analyze them from the perspective of various affected interest groups. This is one of the more difficult parts of the process because it requires the problemsolver to evaluate the effects of an alternative from a variety of different perspectives. This might typically require a resource manager to view effects not only from his/her own perspective, but also from that of a rancher, hunter, bird watcher, and miner. Early public involvement, particularly on actions which are locally controversial, can be very helpful in identifying and analyzing effects--especially social and economic effects. Mitigation measures or alternatives can then be developed if adverse effects are noted.

Effects analysis is a key focal point of the NEPA process. It is through the analysis undertaken in this step that the preferred alternative can be selected. Additionally, it is at this juncture in the process that interdisciplinary analysis plays a key role. Especially useful, where opportunities allow, is the evaluation of the various effects of all alternatives by a team of several different disciplinary specialists to discover indirect, cumulative, or synergistic effects that may result from implementation of a given alternative. Interdisciplinary effects assessment can be undertaken completely in-house, where appropriate disciplinary capabilities are present on staff, through the assistance of outside expertise, through expertise provided by other agencies, or in the forum provided at a structured public workshop.

Effects upon environmental features of special legal significance should be highlighted. Such features would include: threatened or endangered plant or animal species or their critical habitats, wetlands, 100-year flood plains, cultural resources (historic, architectural, and archaeological sites and artifacts), and specially designated areas (e.g., research natural areas or wilderness areas, etc.). Additionally, legal clearances and permit requirements should be identified. The relationship between short term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible commitments of resources should also be identified. When adverse effects are noted, potential mitigative measures to reduce or eliminate such effects should be identified. Such mitigative measures can then be worked back into the alternatives as they are refined and finalized.

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4 RM 5 Exhibit 1

Four-Step NEPA Planning Process

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The use of a matrix such as Exhibits 2 and 3 can best display the affects of the various alternatives. Environment features to be considered when analyzing the affects of alternatives are in Exhibit 4.

- D. Select preferred alternatives. Based on the effects assessment, and a determination of the extent to which various alternatives solve identified problems or meet stated needs, a preferred alternative (proposed action) can be chosen. Generally, the preferred alternative should be that action which would satisfy the greatest number of needs and result in the fewest adverse effects. The rationale for selection of the preferred alternative should be clear following completion of the above three tasks.

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4 RM 5 Exhibit 2

Selection Standards - Qualitative Matrix

SELECTION STANDARDS

	Refuge Goals	Environ. Effects	Floodplain/ Wetland	Economic	Technical Feasibility	Socio- logical
Altern. A	++	+	0	+	0	0
Altern. B	++	+	-	-	0	+
Altern. C	-	-	+	+	-	+
Altern. D	+	0	+	++	-	0
Altern. E	+	-	--	0	+	+

++ exceeds standards

+ meets standards

0 neutral

- does not meet standards

-- serious deficit

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4 RM 5 Exhibit 3

Resources Affected - Quantitative Matrix

RESOURCES AFFECTED

Alternatives	Wetland Resources	Waterfowl Production	Public Use	Agricultural Use	Effects on Tax Base	Estimated Engineering Costs
No Action	Loss of 200 acres	Unknown loss of ducklings	0	Potential loss of 400 acres	No effect	0
Alternative A	Gain of 250 acres	2,500 ducklings annually	10,000 visitor days	400 acres kept in production	Loss to town of \$650.00 annually	\$800,000
Alternative B	Gain of 200 acres	1,900 ducklings annually	8,500 visitor days	400 acres kept in production	Loss to town of \$450.00 annually	\$550,000
Alternative C	Gain of 350 acres	3,500 ducklings annually	12,500 visitor days	400 acres kept in production	Loss to town of \$800.00 annually	\$950,000

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The following are the major environmental features that should be considered during planning. However, only those features that will be measurably affected by or effect a proposed action or its alternatives are to be addressed in the NEPA documentation.

I. Physical Considerations**A. Meteorology**

1. Climate
2. Air Quality

B. Topography

1. Relief
2. Cuts/Fills

C. Geology

1. Earthquake/Landslide
2. Minerals
3. Energy Resource Depletion/Conservation
4. Radioactive & Toxic Substances/Heavy Metals

D. Soils

1. Erosion/Deposition
2. Siltation
3. Soil Quality

E. Hydrology

1. Surface & Ground Water Quality/Quantity
2. Absorption/Drainage
3. Flooding
4. Hydro/Geothermal Energy Sources

II. Biological Considerations**A. Vegetation**

1. Species of Special Concern
2. Critical Wildlife Habitat
3. Species Diversity/Abundance
4. Noxious Weeds/Exotic Plants/Pathogens

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B. Wildlife

1. Species of Special Concern
2. Species Diversity/Abundance
3. Game/Non-Game Species
4. Pests/Pathogens/Vectors/Predators/Feral or Exotic Animals

III. Social Considerations

A. Cultural

1. Archeological/Historic Sites
2. Educational/Recreational Opportunities

B. Economic

1. Cost
2. Employment
3. Commercial/Industrial Buildings
4. Taxes/Property Values

C. Land Use

1. Plans/Policies/Controls
2. Development/Growth
3. Farmland/Open Space/Natural Areas
4. Transportation Facilities/Public Utilities

D. Social

1. Quality of Life
2. Community Cohesion
3. Residents/Residences
4. Population Change
5. Human Health/Safety
6. Public Services
7. National Defense

E. Aesthetics

1. Scenery
2. Noise
3. Odor